

SEQUENCE LISTING

<110> Magna, Holly
 Schaffer, Paul
 Lawton, Michael
 Yocum, Sue
 Mitchell, Peter
 Hutchinson, Nancy
 Murry, Lynn E.

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 <141> 1997-12-22

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 Val Asp His Pro Gly Gly Asp Gly Asp Phe Glu Ser Leu Ala Ala Ile
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 Val His Leu Asn Pro Thr Arg Gly Phe Trp Cys Leu Asn Arg Glu Gln
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 Ala Gly Asp Ala Cys Pro Gly Arg Pro Leu Glu Ala Gln Lys Cys Val
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 Ala Gly Gln Asn Val Thr Phe Cys Cys Lys Ala Ser Gly Thr Pro Met
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 Cys Asp Pro Arg Pro Arg Glu Tyr Leu Ile Lys Leu Pro Glu Asp Cys
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 Asp Thr Arg Cys Pro Ser Leu Ala Gly Ser Ser Pro Arg Cys Gly Asp
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 Cys Gln Lys Cys Leu Pro Pro Arg Gly Leu Val Arg Gly Arg Val Val
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 Gln Val Gly Pro Val Ala Val Arg Val Ala Ala Ser Gln Ile His Met
 660 665 670
 Pro Gly His Val Glu Ala Leu Lys Leu Trp Ser Leu Asn Pro Glu Thr
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 Gly Leu Trp Glu Glu Glu Ser Gly Phe Arg Arg Glu Gly Ser Ser Gly
 690 695 700

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Ile	Arg	Glu	Arg	Arg	Leu	Phe	Asn	Leu	Asp	Val	Pro	Glu	Arg	Arg	Arg
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Cys	Phe	Val	Lys	Val	Arg	Ala	Tyr	Ala	Asn	Asp	Lys	Phe	Thr	Pro	Ser
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Glu	Gln	Val	Glu	Gly	Val	Val	Val	Thr	Leu	Val	Asn	Leu	Glu	Pro	Ala
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Pro	Gly	Phe	Ser	Ala	Asn	Pro	Arg	Ala	Trp	Gly	Arg	Phe	Asp	Ser	Ala
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Arg	Pro	Asp	Ala	Tyr	Thr	Ala	Leu	Val	Thr	Ala	Thr	Leu	Gly	Gly	Glu
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Glu	Leu	Glu	Pro	Ala	Pro	Ser	Leu	Pro	Arg	Pro	Leu	Pro	Ala	Thr	Val
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Gly	Val	Thr	Gln	Pro	Tyr	Leu	Asp	Arg	Leu	Gly	Tyr	Arg	Arg	Thr	Asp
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His	Asp	Asp	Pro	Ala	Phe	Lys	Arg	Asn	Gly	Phe	Arg	Ile	Asn	Leu	Ala
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35     40     45
Thr Leu Glu Ser Pro Gly Glu Trp Thr Thr Trp Phe Asn Ile Asp Tyr
50     55     60
Pro Gly Gly Lys Gly Asp Tyr Glu Arg Leu Asp Ala Ile Arg Phe Tyr
65     70     75     80
Tyr Gly Asp Arg Val Cys Ala Arg Pro Leu Arg Leu Glu Ala Arg Thr
85     90     95
Thr Asp Trp Thr Pro Ala Gly Ser Thr Gly Gln Val Val His Gly Ser
100    105    110
Pro Arg Glu Gly Phe Trp Cys Leu Asn Arg Glu Gln Arg Pro Gly Gln
115    120    125
Asn Cys Ser Asn Tyr Thr Val Arg Phe Leu Cys Pro Pro Gly Ser Leu
130    135    140
Arg Arg Asp Thr Glu Arg Ile Trp Ser Pro Trp Ser Pro Trp Ser Lys
145    150    155    160
Cys Ser Ala Ala Cys Gly Gln Thr Gly Val Gln Thr Arg Thr Arg Ile
165    170    175
Cys Leu Ala Glu Met Val Ser Leu Cys Ser Glu Ala Ser Glu Glu Gly
180    185    190
Gln His Cys Met Gly Gln Asp Cys Thr Ala Cys Asp Leu Thr Cys Pro
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Met Gly Gln Val Asn Ala Asp Cys Asp Ala Cys Met Cys Gln Asp Phe
210    215    220

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Asp	Ser	Asp	Gly	Arg	Phe	Arg	Ile	Pro	Gly	Leu	Cys	Pro	Asp	Gly	Lys	260	265	270	
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Arg	Ala	Gly	Gln	Ser	Val	Ser	Leu	Cys	Cys	Lys	Ala	Thr	Gly	Lys	Pro	325	330	335	
Arg	Pro	Asp	Lys	Tyr	Phe	Trp	Tyr	His	Asn	Asp	Thr	Leu	Leu	Asp	Pro	340	345	350	
Ser	Leu	Tyr	Lys	His	Glu	Ser	Lys	Leu	Val	Leu	Arg	Lys	Leu	Gln	Gln	355	360	365	
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Ser	Cys	Gln	Arg	Cys	Thr	Glu	Thr	Arg	Ser	Ile	Val	Arg	Gly	Arg	Val	485	490	495	
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His	Val	Pro	Gln	Asp	Thr	Glu	Arg	Leu	Val	Leu	Thr	Phe	Val	Asp	Arg	530	535	540	
Leu	Gln	Lys	Phe	Val	Asn	Thr	Thr	Lys	Val	Leu	Pro	Phe	Asn	Lys	Lys	545	550	555	560
Gly	Ser	Ala	Val	Phe	His	Glu	Ile	Lys	Met	Leu	Cys	Arg	Lys	Glu	Pro	565	570	575	
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Val	Gly	Glu	Asp	Pro	Met	Ala	Glu	Leu	Glu	Ile	Pro	Ser	Arg	Ser	Phe	595	600	605	
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Tyr	Gly	Met	Phe	Ser	Val	Asp	Phe	Arg	Asp	Glu	Val	Thr	Ser	Glu	Pro	660	665	670	
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Pro	Arg	Pro	Asn	Ser	Ala	Glu	Glu	Ser	Asn	Gly	Pro	Ile	Tyr	Ala	Phe
			885						890					895	
Glu	Asn	Leu	Arg	Ala	Cys	Glu	Glu	Ala	Pro	Pro	Ser	Ala	Ala	His	Phe
			900					905					910		
Arg	Phe	Tyr	Gln	Ile	Glu	Gly	Asp	Arg	Tyr	Asp	Tyr	Asn	Thr	Val	Pro
		915					920					925			
Phe	Asn	Glu	Asp	Asp	Pro	Met	Ser	Trp	Thr	Glu	Asp	Tyr	Leu	Ala	Trp
		930				935					940				
Trp	Pro	Lys	Pro	Met	Glu	Phe	Arg	Ala	Cys	Tyr	Ile	Lys	Val	Lys	Ile
945					950					955					960
Val	Gly	Pro	Leu	Glu	Val	Asn	Val	Arg	Ser	Arg	Asn	Met	Gly	Gly	Thr
				965					970					975	
His	Arg	Arg	Thr	Val	Gly	Lys	Leu	Tyr	Gly	Ile	Arg	Asp	Val	Arg	Ser
			980					985					990		
Thr	Arg	Asp	Arg	Asp	Gln	Pro	Asn	Val	Ser	Ala	Ala	Cys	Leu	Glu	Phe
		995					1000					1005			
Lys	Cys	Ser	Gly	Met	Leu	Tyr	Asp	Gln	Asp	Arg	Val	Asp	Arg	Thr	Leu
	1010					1015					1020				
Val	Lys	Val	Ile	Pro	Gln	Gly	Ser	Cys	Arg	Arg	Ala	Ser	Val	Asn	Pro
1025					1030					1035					1040
Met	Leu	His	Glu	Tyr	Leu	Val	Asn	His	Leu	Pro	Leu	Ala	Val	Asn	Asn
			1045						1050					1055	
Asp	Thr	Ser	Glu	Tyr	Thr	Met	Leu	Ala	Pro	Leu	Asp	Pro	Leu	Gly	His
			1060					1065					1070		
Asn	Tyr	Gly	Ile	Tyr	Thr	Val	Thr	Asp	Gln	Asp	Pro	Arg	Thr	Ala	Lys
		1075					1080					1085			
Glu	Ile	Ala	Leu	Gly	Arg	Cys	Phe	Asp	Gly	Thr	Ser	Asp	Gly	Ser	Ser
	1090					1095					1100				
Arg	Ile	Met	Lys	Ser	Asn	Val	Gly	Val	Ala	Leu	Thr	Phe	Asn	Cys	Val
1105					1110					1115					1120
Glu	Arg	Gln	Val	Gly	Arg	Gln	Ser	Ala	Phe	Gln	Tyr	Leu	Gln	Ser	Thr
				1125					1130					1135	
Pro	Ala	Gln	Ser	Pro	Ala	Ala	Gly	Thr	Val	Gln	Gly	Arg	Val	Pro	Ser
			1140					1145					1150		
Arg	Arg	Gln	Gln	Arg	Ala	Ser	Arg	Gly	Gly	Gln	Arg	Gln	Ser	Gly	Val
		1155					1160					1165			
Val	Ala	Ser	Leu	Arg	Phe	Pro	Arg	Val	Ala	Gln	Gln	Pro	Leu	Ile	Asn
		1170					1175					1180			